# ***Requirement Specification***

My project is a fight simulation system. My three classes are: an instantiable Fighter class which allows the user to create fighter objects and input all the required details, an instantiable Arena class which allows the user to create an arena where the event will take place and input all the required details, and an instantiable DriverProgram class which will simulate the fight.

The user creates two fighters by creating an instance of the Fighter class within the DriverProgram class. The user also creates an arena by creating an instance of the Arena class within the DriverProgram class yet again. Once that has been done and the validation has been satisfied, a button appears which will allow the user to begin the fight.

Once in the fight and all the messages are displaying correctly, an algorithm is initiated. Fighter 1 will always go first and has a two choices: punch and kick, the same applies for Fighter 2. Once they have picked one of the options, it’s the other Fighter’s turn. This algorithm keeps looping around until one of the Fighter’s health is less than or equalled to zero. Then an appropriate message is displayed on the screen and the user may restart the fight if they wish.

* Each Fighter’s Initial Health: 100%
* Punch: 10% damage dealt (70% hit connection ratio)
* Kick: 30% damage dealt (30% hit connection ratio)

The ratios are created using the Math.random() method partnered with if-else statements.